Total No. of Questions :10] *[Total No. of Printed Pages :2*

Roll No .....

EC - 804

B.E. VIII Semester

Examination, June 2014

TV & Radar Engineering

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt one question from each unit.
ii) Each question carry equal marks.

Unit-I

1. a) What is kell factor? Also discuss what is interlaced scanning and its utilities?
   b) With the help of diagram explain the working of vidicon camera.

OR

2. a) Draw the composite video signal and discuss the utility of different pulses introduced in the video signal.
   b) Discuss the working of CCD image sensors.

Unit-II

3. a) Discuss the working of trinitron picture tube.
   b) Explain about the co-channel interference and ghost image during propagation of television signals. How can we overcome them.

OR

4. a) How is mixing of colors take place in colour television. Also explain hue and saturation.

   b) With the help of block schematic explain the working of television receiver.

Unit-III

5. a) Discuss the working of video processor unit.
   b) Discuss the performance of high performance computer controlled TV (HPCC TV).

OR

6. a) Discuss the working of audio processor unit.
   b) Discuss the working of 3-D stereoscopic television techiniques.

Unit-IV

7. a) Describe the performance factors of radar in detail.
   b) With the help of block diagram explain the working of FM-CW radar.

OR

8. a) Discuss about the pulse repetition frequency and range ambiguities.
   b) With the help of block diagram explain the working of (MTI) Radar.

Unit-V

9. Write short notes on the following
   a) Duplexer and receiver protectors.
   b) ASR.

OR

10. Write short notes on the following
    a) Radar display.
    b) Bistatic radar.